

In the Matter of )  
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Comment on Hatfield Report on Technical ) WT Docket No. 02-46  
And Operational Wireless E911 Issues )  
  
To: Chief, Wireless Telecommunications Bureau

PCIA, The Wireless Infrastructure Association, by its attorneys and pursuant to FCC Public Notice DA 02-2666<sup>1</sup>, hereby files these comments in response to the Commission's request for comment on the "Report on Technical and Operational Issues Impacting The Provision of Wireless Enhanced 911 Services" submitted by Dale Hatfield on October 15, 2002 (the "Hatfield Report"). PCIA submits these Comments to bring to the Commission's attention obstacles to E911 infrastructure deployment that were not addressed in the Hatfield Report, and to suggest solutions to these obstacles. PCIA submits that the efficient deployment of a functional, national wireless E911 network cannot occur without the efficient deployment of the wireless infrastructure facilities that support CMRS carriers. In addition, PCIA urges the Commission to implement the Hatfield Report's recommendation for a national wireless E911 clearinghouse, and offers the Commission its assistance in developing this recommendation.

PCIA is the principal trade association representing the wireless telecommunications and broadcast infrastructure industry. PCIA represents companies that manage and develop

<sup>1</sup> FCC Public Notice DA 02-2666, released October 16, 2002.

communications towers and antenna facilities for all types of wireless and broadcast services. PCIA members build and manage the antenna structures that are needed to provide Americans with the national goal of universal, seamless, digital and broadband services for broadcast and wireless communications. PCIA members currently own or manage over 50,000 towers throughout the United States, its territories and possessions. In the digital wireless age, towers are indispensable components of the country's wireless telecommunications networks. Towers are a vital part of the critical infrastructure upon which our country's communications networks - including public safety and national security networks - all depend.

Because the business of PCIA's members is integrally connected to the wireless industry, PCIA was very interested in Dale Hatfield's inquiry into technical and operational issues associated with wireless E911 deployment. While Mr. Hatfield's inquiry was broad in scope, and the Hatfield Report recognized the large number of stakeholders involved in the deployment of wireless E911<sup>2</sup>, PCIA was surprised to note that the vital role the wireless infrastructure industry plays in wireless E911 deployment was overlooked both in the inquiry and the report. Consequently, in order to ensure that the record in this proceeding is fully developed, PCIA is filing these comments to provide the Commission with PCIA's unique perspective on obstacles to wireless E911 deployment.

## **II. Local Zoning Policies Have a Significant Impact on Deployment of Critical E911 Infrastructure**

The Commission is well aware that there are two technical solutions by which CMRS carriers can provide wireless E911 service, i.e., a network-based solution and a handset-based solution. Both solutions determine the location of a wireless caller by the process of "triangulation", which involves placing an E911 antenna installation on at least one and up to

three towers (or other supporting structures), as points of reference to pin down a caller's location. And while network-based solutions require more total tower installations than handset-based solutions, both wireless E911 solutions require that E911 antenna facilities be placed on at least one tower or other supporting structure.<sup>3</sup> Consequently, sufficient tower/supporting structure inventory is essential to the deployment of E911 antenna facilities. It follows then that any routine delay in constructing new towers, or in modifying the use of existing towers, will lead to a delay in deploying E911 antenna facilities, which are an important piece of the E911 infrastructure.

One of the biggest obstacles that PCIA members face in serving their CMRS customers is in obtaining local zoning approval to construct new towers, or to modify existing towers so that additional facilities, such as E911 antennas, can be accommodated. Despite the fact that the Telecommunications Act of 1996 contained a provision limiting the bases on which local governments could rely to deny zoning approvals for towers<sup>4</sup>, in most localities, tower site approval continues to be a painfully slow, expensive and uncertain process for tower companies. In many municipalities, there is significant local resistance to approving new tower sites or modifying existing towers. Local governments routinely complicate zoning application processes, conduct lengthy zoning proceedings, and continue to impose moratoria against approving new tower sites or modifying existing sites.

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<sup>2</sup> See Hatfield Report at 18.

<sup>3</sup> Anecdotal evidence indicates that carriers increasingly are switching to network-based solutions to meet the FCC's Phase II E911 requirements, which obviously, exponentially increases the total number of towers/supporting structures needed for E911 antenna installations.

<sup>4</sup> See 47 U.S.C. § 332(c)(7)(B).

Most important to this discussion however is the fact that these same complicated and lengthy zoning procedures apply equally to the placement of E911 antenna installations on new or existing towers. For example, the Zoning Commission of a major east coast city recently amended its tower/antenna zoning ordinance provisions. Because the Zoning Commission was considering adoption of new, onerous regulatory restrictions for all wireless service facilities, during public debate of the proposed changes, undersigned counsel pressed the Zoning Commission for *some type* of relief from the proposed regulations for emergency and public safety facility antennas and equipment (including E911 antenna facilities). We specifically did not request an exemption to the zoning process for new towers or monopoles; rather we advocated for some type of recognition within the zoning approval process of the vital importance of public safety programs in our lives, which therefore would justify some type of relief (e.g., expedited review or waivers for collocations) from the standard zoning approval processes. The idea was rejected outright. Consequently, EMS, police, fire and rescue wireless antenna facilities (including E911 antenna facilities) in this city are still subject to the same zoning delays, and the possibility for denials, that “standard” wireless antenna facilities experience.

Regardless of the particular reason for any zoning delay, the slow pace of tower and antenna site approval and construction logically will continue to result in delayed E911 antenna installation deployment for the simple reason that there is and will continue to be a shortage of approved or acceptable E911 facility structures to make either triangulation-based E911 solution work. Under present allocations of federal, state and local jurisdictional authority, there is no viable solution to this specific E911 deployment delay issue, as local governments will not willingly abdicate control over any aspect of the local zoning process.

Consequently, PCIA recommends that either the FCC or other appropriate federal agency/department examine the efficacy of a federally-mandated expedited zoning review process, or zoning waiver process, for E911 antenna installations. PCIA is an advocate of streamlining the regulation of tower structures,<sup>5</sup> particularly in terms of collocation of antenna facilities. However, if the ultimate goal of this proceeding is for the FCC and the federal government to take the measures necessary to ensure the efficient deployment of a functional, national wireless E911 network, then PCIA firmly believes that certain aspects of the tower/antenna siting zoning process must be streamlined for this goal to be achieved. PCIA notes that this recommendation is consistent with the Hatfield Report's observation that a goal of increased coordination on wireless E911 issues is to get to the stage where implementation of wireless E911 "would become more of a 'plug and play' approach,"<sup>6</sup> in other words, less individualized review and "custom-tailoring" for implementing wireless E911 systems. Clearly, the current approach of requiring individualized zoning hearings for many of the hundreds of thousands of E911 antenna installations that will be required to deploy wireless E911 cannot be reconciled with the Hatfield Report's recommendation for increased coordination among stakeholders in order to streamline the deployment process.<sup>7</sup>

PCIA also notes that some of the general recommendations made in the Hatfield Report could apply equally to the E911 antenna deployment/zoning issue. For example, the Hatfield Report urges increased coordination among various wireless E911 stakeholder groups and the creation of organizations at the state, regional and local levels of government to coordinate the

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<sup>5</sup> See, e.g., Comments of PCIA on the Draft Programmatic Agreement for Streamlining Section 106 Review, filed June 13, 2002.

<sup>6</sup> Hatfield Report at 21.

<sup>7</sup> See generally *id.*

rollout of wireless E911 services.<sup>8</sup> Specifically, the Hatfield Report discusses the need for some type of voluntary project manager or coordinating body to coordinate among the various stakeholders in the wireless E911 deployment process. One of the primary objectives of the proposed project manager would be to facilitate the greater exchange of information among the stakeholders, thereby expediting wireless E911 deployment. PCIA submits that if regional and local government representatives involved in coordinating wireless E911 rollout consulted with their governmental colleagues handling tower zoning issues on E911 implementation issues, tower zoning debates, at least regarding E911 issues, could be more informed and hopefully, expedited. As the Hatfield Report noted, a “high degree of coordination and cooperation among disparate entities ... must be affected to achieve the vision set forth in the E911 Act.”<sup>9</sup>

To that end, PCIA urges the Commission to take the steps necessary to implement or encourage greater coordination among wireless E911 stakeholders at the local, state and federal level, and to specifically include the wireless infrastructure industry as a stakeholder. As explained above, tower-siting-zoning issues are an important, yet seemingly overlooked, component in wireless E911 facilities deployment. Consequently, PCIA members should be included in the coordinated groups of interested stakeholders. PCIA also suggests that coordination on tower zoning/wireless E911 deployment issues could be expected to occur at the association level between and among such entities as PCIA, NARUC, NATOA, and other representatives of state and local governments.

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<sup>8</sup> See Hatfield Report at p. iv; pp. 23-26.

<sup>9</sup> Hatfield Report at 21.

### **III. Encouraging Collocation of E911 Antennas Could Expedite E911 Infrastructure Deployment**

PCIA believes that increased use of shared infrastructure, such as the collocation of E911 antennas on a tower, could expedite E911 network deployment. PCIA understands that at least one wireless equipment manufacturer offers a dual-band E911 antenna that could serve several carriers, so that only a single E911 antenna assembly would need to be installed on a tower. The benefits to this approach are obvious: the visual/aesthetic impact on the tower is reduced, a more compelling case can be presented to local zoning boards than with each carrier insisting on separate equipment, and ultimately the zoning process is completed more efficiently and more carriers have deployed critical E911 equipment.

PCIA also believes that the collocation concept could apply to more than just E911 antenna equipment on towers. Specifically, because tower companies also own and/or manage rooftops, water towers and other specialized spaces, PCIA members have the ability to collocate radio equipment used in wireless E911 systems as well as the E911 antennas. Collocation of base station equipment can be more efficient because carriers do not have to compete for space to set up their equipment. This type of shared infrastructure approach also saves carriers the expenses associated with designing, building operating and maintaining their equipment. Again, however, the most important benefit to collocation of facilities is that the wireless E911 equipment deployment process is expedited by consolidating the amount of coordination that needs to take place.

Given the benefits of the collocation model, and the delays and uncertainty inherent in zoning processes, PCIA urges the FCC in its overall review of the wireless E911 deployment scenario, to consider implementing a federal policy on collocation of public safety facilities.

Specifically, PCIA believes that collocation should be permitted “by right”, with minimal or no local regulation permitted.

#### **IV. PCIA Supports the Hatfield Report’s Recommendation for a National Wireless E911 Clearinghouse**

One of the primary recommendations Mr. Hatfield makes in his report is that “a national level clearinghouse be established to collect, store and disseminate status information on the rollout of wireless E911.”<sup>10</sup> As explained above, PCIA strongly supports greater coordination among wireless E911 stakeholders to speed deployment of a national wireless E911 system. In addition, given PCIA’s extensive experience operating a Microwave Clearinghouse created by and for PCS carriers, PCIA strongly endorses the creation of a national wireless E911 clearinghouse as a way to spur that coordination. Based on its experience, PCIA believes that a government-mandated regulatory process involving many parties with disparate interests has the potential to become bogged down and ineffective if the process is not centralized and managed competently. Consequently, PCIA wholeheartedly supports the Hatfield Report’s national clearinghouse recommendation.

The Hatfield Report envisions the proposed clearinghouse serving two purposes. First, it would “facilitate the needed exchange of information among the stakeholders.” And second, it would “publish regular reports on the Nation’s progress towards establishing a seamless, ubiquitous, reliable wireless E911 network.”<sup>11</sup> While the Hatfield Report does not make recommendations as to where in the overall wireless E911 organizational structure the proposed clearinghouse should be located, or how it should be funded, the report notes that the Commission could serve this function itself, or, if funding is available, the clearinghouse

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<sup>10</sup> Hatfield Report at p. 25; see also Hatfield Report at p. iv.

<sup>11</sup> Hatfield Report at pp. 25-26.

function could be contracted out to knowledgeable organizations. The Hatfield Report notes that NENA and APCO are knowledgeable organizations on the wireless E911 issue, and that they have done a “commendable job in reporting on the status of E911 in the past.”<sup>12</sup> However, the report correctly observes that “issues might arise from the fact that NENA and APCO are parties in various proceedings involving E911 before the Commission.”<sup>13</sup>

The PCIA Microwave Clearinghouse was created in 1996 as a cooperative venture by PCS carriers to administer the FCC’s 2 GHz microwave incumbent relocation cost-sharing plan. The cost-sharing plan provides for the equitable sharing of costs incurred by PCS carriers from their relocation of 2 GHz microwave facilities, which has resulted in the more rapid build-out of PCS facilities. It is a nonpartisan, non-profit entity that has been hailed as a prime example of the wireless industry regulating itself. In administering the Microwave Clearinghouse, PCIA has worked extensively with the PCS industry (all national PCS carriers are represented on the clearinghouse’s governing board) collecting sizeable amounts of complex, technical data, and distilling that information for dissemination to affected entities. The Microwave Clearinghouse performs these tasks for the wireless industry in a fair, nonpartisan, and when necessary, confidential manner. In addition, PCIA has the benefit of being extremely familiar with the wireless industry and the issues facing it, and our association has been closely monitoring wireless E911 proceedings and industry developments, while maintaining a neutral stance on this matter. Consequently, PCIA has the ability to offer experienced, knowledgeable yet objective advice on this issue.

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<sup>12</sup> *Id.* at p. 26.

<sup>13</sup> *Id.*

Given this background, PCIA submits that it is uniquely positioned to offer valuable advice in the creation of a national wireless E911 clearinghouse, and if implemented, in administering the clearinghouse. While the Hatfield Report's recommendation is a general one, with many high level details to be determined, PCIA urges the Commission to pursue the Hatfield Report's national clearinghouse recommendation, and PCIA would be pleased to offer any advice and assistance necessary in achieving this very important goal.

#### **IV. CONCLUSION**

Based on the experiences of its members, PCIA believes that the efficient deployment of a functional, national wireless E911 network cannot occur without the efficient deployment of wireless infrastructure facilities that support CMRS carriers, and PCIA urges the Commission to consider its suggestions that would allow for a more efficient deployment of E911 antenna facilities. In addition, PCIA urges the Commission to implement the Hatfield Report's recommendation for a national wireless E911 clearinghouse. To accomplish this goal, PCIA offers the Commission its assistance in assessing and implementing the clearinghouse recommendation.

Respectfully submitted,  
**PCIA**

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## **CERTIFICATE OF SERVICE**

I, Elinor McCormick, hereby certify that on this 15th day of November, 2002, I had copies of the foregoing "Comments of PCIA" hand-delivered or sent by U.S. first class mail, postage prepaid, to the following:

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